

# Work Order ID 81003

Tuesday, March 06, 2012 12:45:56 PM

**\*81003\***

Page 1

Item ID: D4148-041

Accept

**\*N9000040100\***

Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Crosstube Lug Assembly, Fwd

Start Date: 3/6/2012 Start Qty: 6.00

**\*6\***

Cust Item ID:

Required Date: 3/12/2012 Req'd Qty: 6.00

**\*6\***

Customer:

Reference:

Approvals: Process Plan: *umf*

Date: 12-03-06 Tooling:

Date:

Run Start **\*NR1\***

QC:

Date: SPC (Y/N):

Date:

Stop **\*NR2\***

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D4148

D

100

0.00

**\*100\***

Small Fab

Memo

0.00

Small Fab

1- Assemble as per dwg

*GB 12/03/15*

110

QC5- Inspect part completeness to step on W/O

0.00

**\*110\***

QC

Memo

0.00

Quality Control

*5 12/03/15*

*(B)*

120

Identify as per dwg & Stock Location

0.00

**\*120\***

Packaging

Memo

0.00

Packaging

*8468*

*(B) 8468-15*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 81003**

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**\*81003\***

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**Item ID:** D4148-041**Accept****\*N900040100\*****Setup Start \*NS1\*****Revision ID:****Stop \*NS2\*****Item Name:** Crosstube Lug Assembly, Fwd**Start Date:** 3/6/2012 **Start Qty:** 6.00**\*6\*****Cust Item ID:****Required Date:** 3/12/2012 **Req'd Qty:** 6.00**\*6\*****Customer:****Reference:****Approvals:** **Process Plan:****Date:****Tooling:****Date:****Run Start \*NR1\*****QC:****Date:****SPC (Y/N):****Date:****Stop \*NR2\*****Sequence ID/  
Work Center ID****Operation  
Description****Set Up/  
Run Hours****Tool ID Tool # Plan Accept Reject Reject Insp.  
Code Qty Qty Number Stamp**

130

QC21- Final Inspection - Work Order Release

0.00


**\*130\***

QC

**Memo**

0.00

Quality Control

12/3/15 

12-03-15

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries

# Picklist Print

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Work Order ID: 81003

Parent Item: D4148-041

Parent Item Name: Crosstube Lug Assembly, Fwd

Start Date: 3/6/2012

Required Date: 3/12/2012

Start Qty: 6.00

Required Qty: 6.00

Comments: IPP Rev:A 10.06.24 new issue DD verf:EC  
 IPP Rev:B 10.07.22 as per revB DD verf:JLM IPP Rev:C 10.10.29 as per revC  
 DD verf:EC IPP REV:D 11.03.02 AS PER DWG REV.D DD VERF:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MS21043-3 Nut		Purchased	No			100	Each	1,116.0000	4	12		3/12/03/15	

Location	Loc Qty	Loc Code
FG	72	
103691	72	
GA	362	
120693	362	10
ST300	189	
119901	189	
ST301	493	
118077	2	
118614	441	
118686	30	
119758	20	

MS21043-4 Nut	Purchased	No			100	Each	1,490.0000	1	18		3/12/03/15	
------------------	-----------	----	--	--	-----	------	------------	---	----	--	------------	--

Location	Loc Qty	Loc Code
FG	40	
104603	40	
ST300	14	
118686	14	
ST301	1436	
117793	26	
119546	439	15
120308	971	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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Page 2

Work Order ID: 81003

Parent Item: D4148-041

Parent Item Name: Crosstube Lug Assembly, Fwd

Start Date: 3/6/2012

Required Date: 3/12/2012

Start Qty: 6.00

Required Qty: 6.00

D2690-6 Manufactured No  
Lanyard Assembly

100 Each 30.0000 1 6

Location

Loc Qty

Loc Code

ST016

30

79515

30

5

D3910-1 Manufactured No  
Crosstube Lug

100 Each 15.0000 1 6

Location

Loc Qty

Loc Code

st507

15

78326

15

5

D4091-1 Manufactured No  
Mounting Lug

100 Each 0.0000 1 6

D4148-1 Manufactured No  
Crosstube Lug Plate, Fwd

100 Each 23.0000 2 12

Location

Loc Qty

Loc Code

ST132

23

78331

23

10

D4148-3 Manufactured No  
Stud Receiver, Lower

100 Each 10.0000 1 6

Location

Loc Qty

Loc Code

ST133

10

79055

10

65

D4148-5 Manufactured No  
Eyebolt Stud

100 Each 7.0000 1 6

Location

Loc Qty

Loc Code

ST133

7

78330

7

5

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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Work Order ID: 81003

Parent Item: D4148-041

Parent Item Name: Crosstube Lug Assembly, Fwd

Start Date: 3/6/2012

Required Date: 3/12/2012

Start Qty: 6.00

Required Qty: 6.00

AN3C12A Purchased No 100 Each 348.0000 2 12

Bolts

Location	Loc Qty	Loc Code
GA	50	
120449	50	
ST351	298	
117514	4	
118112	5	
118451	22	
119510	1	
120423	266	

AN4C13A Purchased No 100 Each 182.0000 3 18

BOLT

Location	Loc Qty	Loc Code
ST357	182	
120187	1	
120423	181	

MS17984-C413 Purchased No 100 Each 11.0000 1 6

PIN, QUICK RELEASE

Location	Loc Qty	Loc Code
ST315	11	
114340	1	
118612	2	
120123	2	
120360	5	
120521	1	

MS20615-4M18 Purchased No 100 Each 354.0000 8 48

Rivet

Location	Loc Qty	Loc Code
ST323	354	
118077	190	
118543	164	

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W/O:		WORK ORDER CHANGES					
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# Picklist Print

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Work Order ID: 81003

Parent Item: D4148-041

Parent Item Name: Crosstube Lug Assembly, Fwd

Start Date: 3/6/2012

Required Date: 3/12/2012

Start Qty: 6.00

Required Qty: 6.00

NAS1149C0332R Purchased No

100 Each 4.263.0000 4 24

*EP 12/03/15*

Location

Loc Qty

Loc Code

ST297

4263

118354

607

119736

196

120648

3460

20

NAS1149C0432R Purchased No

100 Each 2.940.0000 6 36

*EP 12/03/15*

Location

Loc Qty

Loc Code

ST297

2940

117291

1940

119124

1000

30

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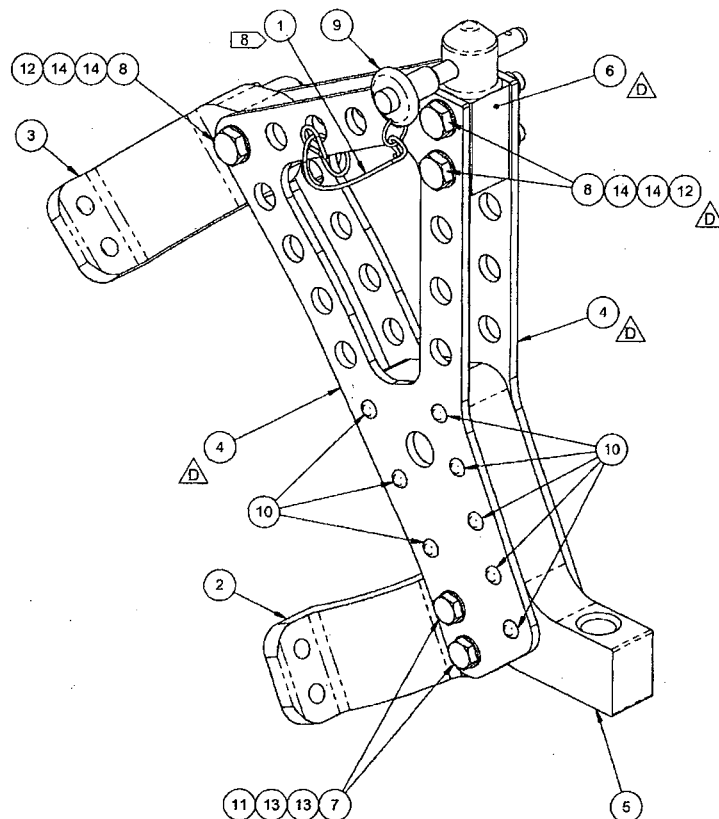
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



**D4148-041 FWD X-TUBE LUG ASSY**

ITEM	QTY -041	P/N	DESCRIPTION
	X	D4148-041	FWD X-TUBE LUG ASSY
1	1	D2690-6	LANYARD
2	1	D3910-1	X-TUBE LUG
3	1	D4091-1	MOUNTING LUG
4	2	D4148-1	FWD X-TUBE LUG PLATE
5	1	D4148-3	STUD RECEIVER LOWER
6	1	D4148-5	EYEBOLT STUD
7	2	AN3C12A	BOLT
8	3	AN4C13A	BOLT
9	1	MS17984-C413	PIP PIN
10	8	MS20615-4M18	RIVET
11	2	MS21043C3	NUT
12	3	MS21043C4	NUT
13	4	NAS1149C0332R	WASHER
14	6	NAS1149C0432R	WASHER

# 81003

RELEASED  
2011-02-24

D	HOLE DIA CHANGED TO 0.252" (D8-3); HOLE DIA CHANGED TO 0.250" (C8-5); REPLACED QTY(2) AN3C12A, MS21043C3 AND QTY(4) NAS1149C0332R WITH QTY(2) AN4C13A, MS21043C4 AND QTY(4) NAS1149C0432R (D3-1,C4-2)	SC	11.02.22
C	REDESIGNED D4148-1/-3 TO ADDRESS COMPATIBILITY ISSUES WITH D350-591 SHORT STEPS	MB	10.10.12
B	REPLACED QTY(3) MS20615-4M18 WITH QTY(2) EACH AN3C12A, MS21043-3 AND QTY(4) NAS1149C0332R WASHER (ZN D3-1, B7-2 & B4-2); MS20615-4M18 WAS MS20615-4M20 (ZN D3-1 & B7-2); Ø0.191 2 PL REPLACES Ø0.129 3 PL (ZN D8-3); Ø0.129 7 PL WAS 10 PL (ZN A7-3); Ø0.191 WAS 0.129 (ZN C8-5); REASON: SEE TR-D350-607-2 REV. B.	MB	10.07.05
A	NEW ISSUE	MB	10.06.18
REV.	DESCRIPTION	BY	DATE
DESIGN	MB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	SC		
CHECKED		DRAWING NO.	REV. D
MFG. APPR.		D4148	SHEET 1 OF 5
APPROVED		TITLE	SCALE
DE APPR.		FWD X-TUBE LUG ASSY	NTS
DATE	11.02.22	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED IN ANY FORM OR BY ANY MEANS WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

- NOTES:
- 1) MATERIAL: N/A
  - 2) FINISH: NONE
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: N/A
  - 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4148-041" PER DART QSI 044 6.1
  - 7) WEIGHT: 3.67 lbs
  - 8) ATTACH D2690-6 TO D4148-1 BY LOOPING AROUND A LIGHTENING HOLE FIRST AND THEN SECURE TO MS17984-C413

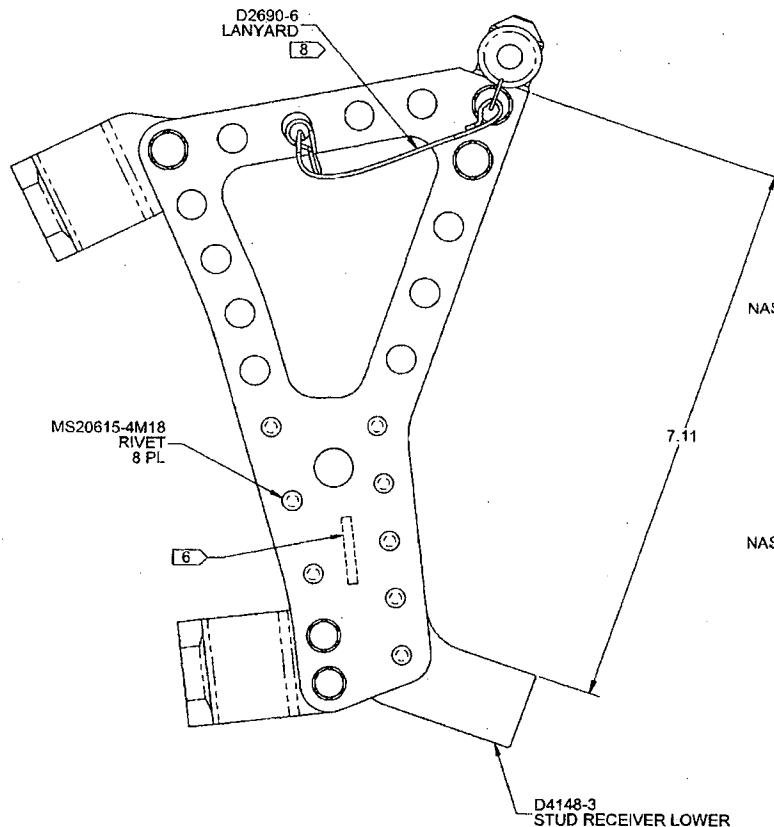
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

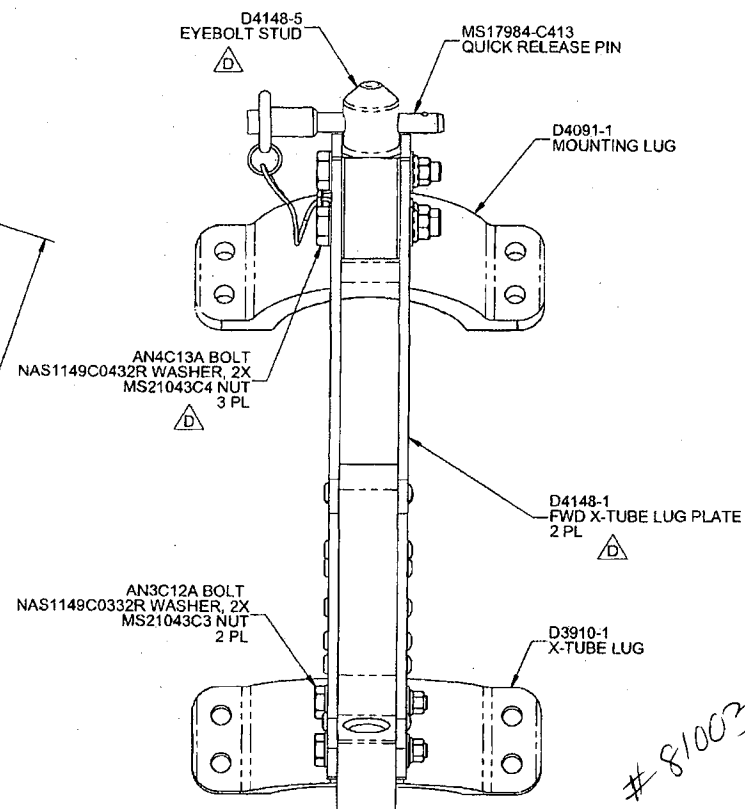
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NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



**D4148-041 FWD X-TUBE LUG ASSY**



#81003

**RELEASED**  
2011-02-24

DESIGN	MB	<b>DART AEROSPACE LTD</b>	
DRAWN	SC	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. D
MFG. APPR.		D4148	SHEET 2 OF 5
APPROVED		TITLE	SCALE
DE APPR.		FWD X-TUBE LUG ASSY	NTS
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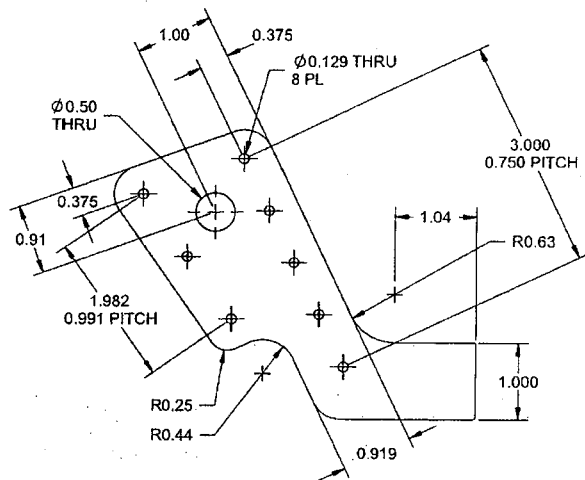
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D

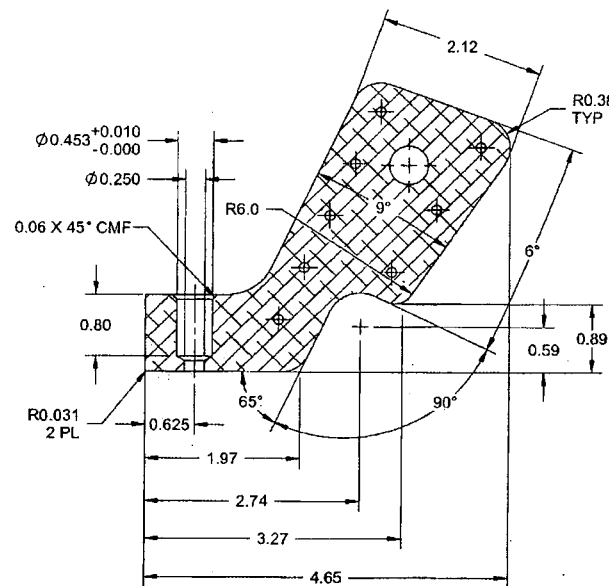
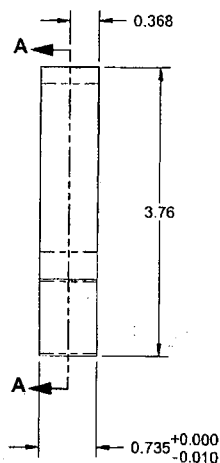
C

B

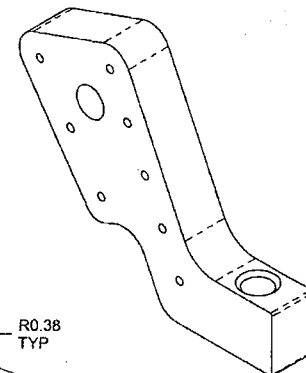
A



**D4148-3 STUD RECEIVER LOWER**



**SECTION A-A**



#81003

**RELEASED**  
2011-02-24

**NOTES:**

- 1) MATERIAL: 303/304/316 STAINLESS STEEL BAR PER ASTM A582 OR ASTM A276  
REF DART SPEC M304B OR M303B
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 1.52 lbs

DESIGN	MB	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	SC		
CHECKED		DRAWING NO.	REV. D
MFG. APPR.		<b>D4148</b>	SHEET 4 OF 5
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DE APPR.		<b>FWD X-TUBE LUG ASSY</b>	NTS
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8 7 6 5 4 3 2 1

